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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,672	12/07/2001	Akira Mashimo	TAK-0377	7295

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EXAMINER

CAO, ALLEN T

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 09/08/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,672

Applicant(s)

MASHIMO, AKIRA

Examiner

Allen T Cao

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/7/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2652

1. Claims 1-9 are objected to because of the following informalities:

a) The term "drive" of the phrase "drive means" throughout the claims, e.g. in claim 1, lines 2, 4 and 20 should be changed to --driving--.

b) The term "chuck" of the phrase "chuck means" throughout the claims, e.g. in claim 1, lines 4, 19 should be changed to --chucking--.

c) The term --lens-- should be added after the phrase "an objective" throughout the claims, e.g. in claim 1, lines 6, 13 for clarification.

d) The term "cleaner" of the phrase "cleaner means" throughout the claims, e.g. in claim 1, line 12 should be changed to --cleaning--.

Appropriate correction is required.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "... half fixed ..." in claim 4 is vague and indefinite because it is conflicted with respect to claim 1: claim 1 discloses that the cleaner carrier together with the cleaner means is inherently completely fixed in the housing of the apparatus (fixed to the spindle in the apparatus, etc ...) but claim 4 (dependent of claim 1) discloses that the cleaner carrier together with the cleaner means thereon is "half fixed" to the housing. Therefore, claim 4 is not examined on the merit.

Art Unit: 2652

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US. 5,488,596) in view of Masaki et al (US. 6,317,401 B1).

Martin discloses a lens-cleaning device for an apparatus for data transfer with a rotating optical disk, the data transfer apparatus having drive means (figures 3 and 4) including a drive spindle to be engaged in a center hole in the optical disk, a transducer movable substantially radially of the optical disk for data transfer therewith, the transducer 23 having an objective lens 22 through which a beam of light (inherently from the lens) is thrown to the optical disk, the lens cleaning device being for cleaning the objective lens of the transducer and comprising: a) a cleaner carrier 1 to be replaceable loaded in the data transfer apparatus and placed in the data transfer position therein like the optical disk; b) cleaner means 18 carried by the cleaner carrier so as to be frictionally engaged by the objective lens of the transducer when the cleaner carrier is in the data transfer position (column 2, lines 37-41); c) there being a clearance opening 12 formed in the cleaner carrier to receive the drive spindle 20 of the data transfer apparatus with clearance when the cleaner carrier is in the data transfer position, the clearance opening being sufficiently large to prevent the lens cleaning device from being engaged to the spindle, and hence from being driven by the drive means, when the cleaner carrier is in the data transfer position; d) whereby the lens

Art Unit: 2652

cleaning device when in the data transfer position permits the driving means to overspeed by being not loaded by the lens cleaning device, from which fact it is ascertainable that the lens cleaning device, not the optical disk, lies in the data transfer position, and whereby the lens cleaning device stays out of rotation in the data transfer position, cleaning the objective lens of the transducer by relative movement thereof with the objective lens in sliding contact with the cleaner means (for c) and d); see throughout the specification; e.g. column 2, lines 28-36; column 3, lines 34-38, etc ...), all as set forth in claim 1.

Regarding claim 2, Martin discloses that the cleaner carrier is in the form of a disk of approximately the same size and shape as the optical disk (column 2, lines 26-29).

Martin does not disclose a chucking means as recited in claim 1.

Masaki et al disclose a disk loading/unloading apparatus having a cleaning member and the loading apparatus including a chucking means (column 3, lines 41-43 and 58-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of martin with a chucking means as set forth, supra as taught by Masaki et al.

The rationale is as follows: One of ordinary skill in the art would have been motivated to provide the apparatus of martin with a chucking means as set forth, supra as taught by Masaki et al to retain the optical disk stable on the spindle, thus provide a more reliability optical disk apparatus. Additionally, one of ordinary skill in the art would

Art Unit: 2652

have been recognized that providing a chucking means to the optical disk apparatus is an obvious known in the optical disk loading/unloading art endeavor.

Regarding claim 3, Masaki et al also disclose a cleaning cartridge, with the cleaner carrier, together with the cleaner means thereon, enveloped in a protective housing of approximately the same shape and size as the housing of the optical disk cartridge, the housing of the cleaning cartridge having a window formed therein to exposed at least part of the cleaner means on the cleaner carrier (figures 6 and 7).

Regarding claim 6, Martin as modified by Masaki et al inherently disclose all the limitations of claim 6 as set forth, in the above rejection. Masaki et al also disclose a controller, transducer means and detector means as set forth in claims 6 and 7 (see figures 8-10).

Regarding claims 8 and 9, all the method steps also inherently disclose by Martin as modified by Masaki et al as set forth, in the above rejection.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin and Masaki et al as applied to claims 1 and 3 above, and further in view of Nakatsu et al (US. 6,324,158 B1).

Martin as modified by Masaki et al do not disclose that the housing of the cleaner cartridge has an openable lid to replacement of the cleaner carrier as recited in claim 5.

Nakatsu et al disclose a disk cartridge having a housing 1 including an open/closed lid 71 to replacement or remove the disk (figure 24 and claim 1).

Art Unit: 2652

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide/modify the disk cleaner cartridge of Martin as modified by Masaki et al with a lid opening as set forth, supra as taught by Nakatsu et al.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide/modify the disk cleaner cartridge of Martin as modified by Masaki et al with a lid opening as set forth, supra as taught by Nakatsu et al to provide a cleaner disk cartridge more efficiency by replacing the disk inside, thus save cost.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimo et al (US. 5,953,301 A), Nakatsu et al (US 2001/00443558) and Masaki et al (US. 5,633,848).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T Cao whose telephone number is (703) 305-3796. The examiner can normally be reached on Mon - Thurs (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Cao
Primary Examiner

AC
September 7, 2004